

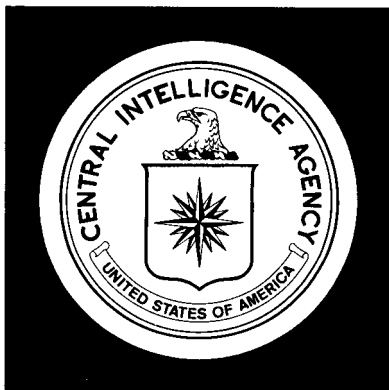
FOR PERSONAL ATTENTION OF:

George H. W. Bush

Director of Central Intelligence

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*A Dollar Comparison of Soviet and US
Defense Activities, 1965-1975*

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A Dollar Comparison
of Soviet and US Defense Activities
1965-1975

Problems in Comparing US and Soviet Programs

The military establishments of the Soviet Union and the US are difficult to compare because they differ so much in missions, structure, and characteristics. Any common denominator used for comparative sizing is inevitably imperfect, and its limitations must be understood in interpreting such comparisons.

Dollar Cost Comparisons. The common denominator used in this report is dollar cost. The approach is to estimate how much it would cost in dollars to reproduce individual Soviet military programs in the US, and then to compare these estimates with expenditure data of the Department of Defense.*

The utility of this approach is that it provides a general appreciation of the overall sizes of defense programs in the two countries. It also reveals trends and relationships between the two defense establishments that are difficult to discern and measure in other ways.

Whatever conclusions are drawn from this dollar cost analysis, however, must be tempered by an appreciation of what it does *not* do. It does not, for example, measure actual Soviet defense expenditures or their burden on the Soviet economy. These questions are addressed by totally different analytical techniques yielding estimates of the *ruble* costs of Soviet military programs. Neither can the dollar cost analysis *alone* be used to draw inferences about the relative military effectiveness or capabilities of US and Soviet forces.

* *The basis for the US financial data presented in this report is the Total Obligational Authority (TOA) series in the January 1976 The Five-Year Defense Program.*

Some activities funded by defense budgets contribute only indirectly to military capabilities--for example, pensions, medical care for dependents, and commissaries--and such activities are likely to be larger in the US than in the Soviet Union. Even those comparisons that focus on costs that contribute directly to capabilities--for example, procurement of weapons--are not necessarily indexes of relative military capabilities. Data on the size and technical characteristics of the forces must also be considered for such judgments.

Finally, dollar cost calculations tend to overstate Soviet programs relative to the US because of a basic measurement problem common to all international economic comparisons and known to economists as the index number problem. If Soviet decision makers were confronted with the US dollar price structure that is used for our dollar cost analysis, rather than the ruble prices they in fact have to pay, they undoubtedly would choose a different and cheaper (in dollar terms) mix of manpower and equipment inputs. While it is not possible to quantify the degree of overstatement that this consideration introduces, it is clearly not large enough to alter the basic conclusion that the Soviet military program overall is currently significantly larger than that of the US.

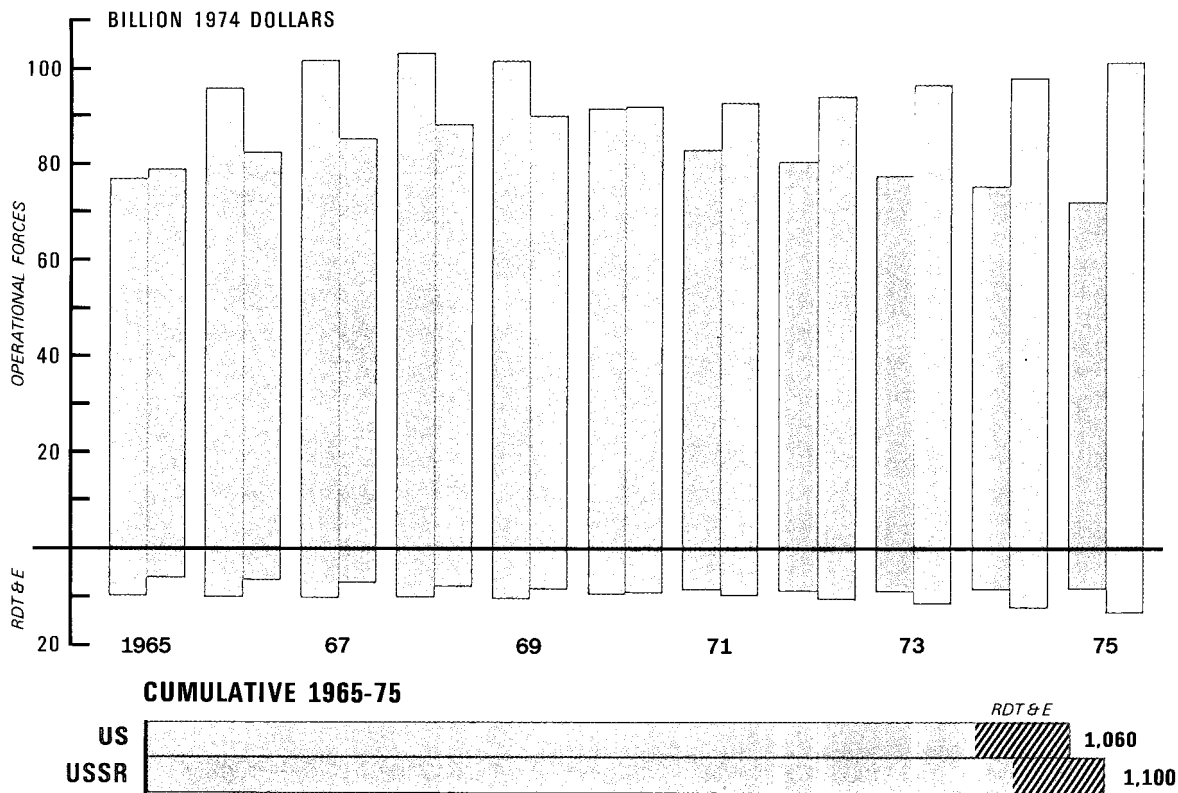
Price Basis and Structure of Comparisons

The dollar cost data presented here for the years 1965-1975 are expressed in constant prices so that all changes in monetary levels from year to year reflect changes in forces and programs rather than the effects of price fluctuations. The base year used is 1974.

The US data have been adjusted to achieve comparable accounting coverage with the dollar estimates made for the USSR as well as converted to constant prices, and therefore do not match actual budget authorizations or appropriations.

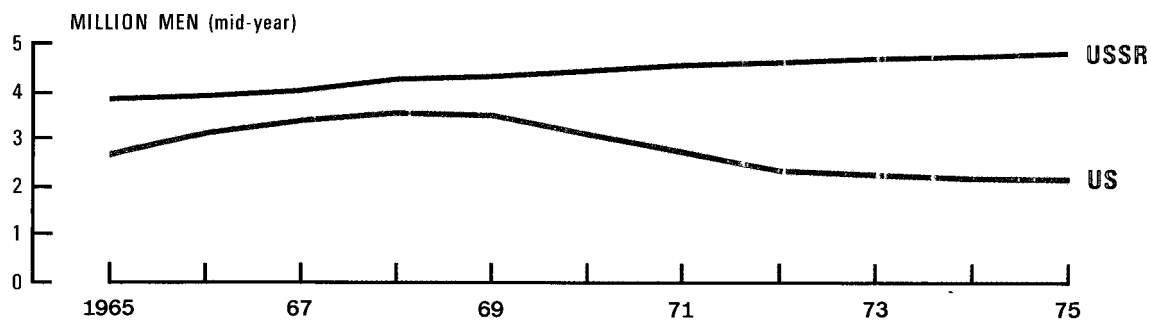
US Expenditures and Estimated Dollar Costs of Soviet Defense Programs

Figure 1



NOTE: The dollar figures for the USSR are estimates of what the Soviet forces and programs would cost if developed, purchased and operated in the US. For operational forces the figures are obtained by costing directly individual Soviet forces and programs. The estimated dollar costs of Soviet RDT&E are derived in the aggregate using a less certain methodology and should be viewed only as rough measures. For this reason they are shown separate from the dollar costs of operational forces. The US defense expenditure series is based on Total Obligational Authority (TOA) data from *The Five-Year Defense Program*, January 1976 (Department of Defense). The US data are in fiscal year terms and the estimated dollar costs of Soviet programs are in calendar year terms.

US and Estimated Soviet Active Military Manpower



NOTE: The manpower series for the USSR includes border guards, internal security troops, and construction troops, for which the US Armed Forces have no counterpart.

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--DoD authorizations for military aid and civil defense are excluded and those for military research, development, testing, and evaluation (RDT&E) have been aggregated into one account.

--Energy Research Development Administration authorizations related to nuclear weapons are included.

Total Defense Costs

The estimated total dollar costs of Soviet defense programs exceed US defense authorizations in every year since 1970. At about 114 billion dollars (1974 prices), they are more than 40 percent higher than comparable US authorizations of 80 billion dollars in 1975. (See Figure 1.) If the costs of pensions are subtracted from both sides, the dollar costs of Soviet programs in 1975 exceed those of the US by 50 percent.

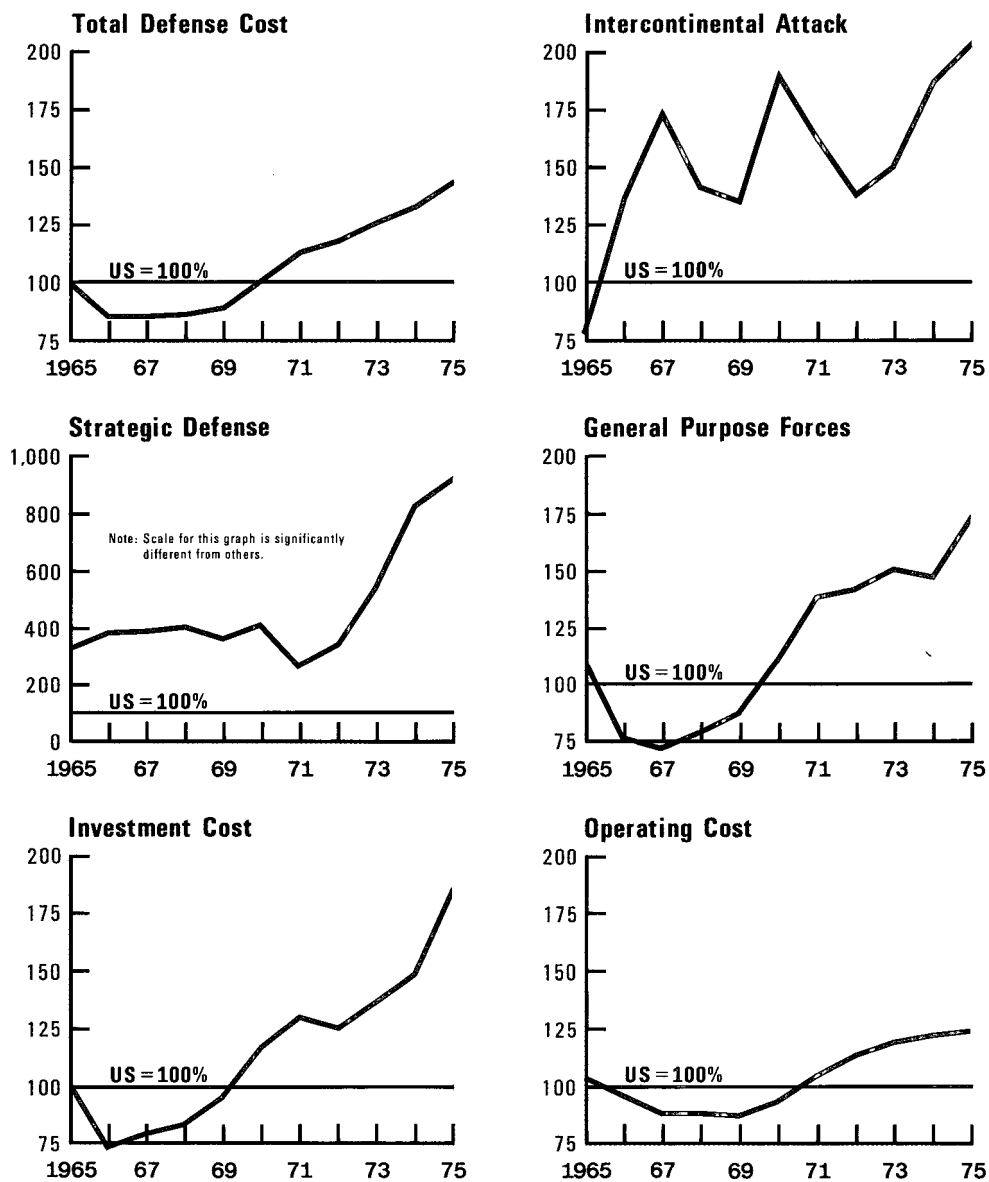
When expressed in *constant US prices*, which measure growth in real terms, the trend in the dollar costs of Soviet defense programs is one of continuous growth throughout the period averaging about 3 percent per year. This growth is evident in nearly all the major components of the Soviet defense establishment. Quite a different picture is seen for the US. Despite increases in the *current dollar costs* of US defense programs, defense authorizations expressed in *constant dollar terms* have declined continuously since the peak of 1968, and since 1973 have been below the 1965 level. This decline reflects reductions in nearly every major US force component in the Seventies, in contrast to the Vietnam buildup of the late Sixties. For the 1965-1975 period as a whole the estimated dollar costs of Soviet programs are not significantly different from cumulative US authorizations. In the Seventies the Soviet total exceeds that of the US by 20 percent.

In Figure 1, the costs of RDT&E are segregated from those of other programs. This is because the analytical problems involved in estimating the dollar costs of Soviet RDT&E are much more difficult than for

Dollar Cost of Soviet Programs as a Percent of US Defense Expenditures*

Figure 2

1974 DOLLAR VALUES



*Department of Defense Total Obligational Authority data have been adjusted to attain comparability with the Soviet data.

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the other elements of the Soviet defense establishment and the uncertainty in these estimates is substantially higher. If the dollar costs for RDT&E are subtracted from both sides for the year 1975, the estimated Soviet figure is 40 percent higher than that of the US.

Manpower

The estimated level of Soviet military manpower exceeds that of the US in every year from 1965 to 1975. Soviet military manpower grows by about one million men during the period. Most of this increase is in the ground forces, although there are some increases in strategic forces as well. On the other hand, US manpower in 1975 was less than its 1965 level.

The Soviets have historically maintained a large military force which has a broader range of responsibilities than the military does in the US. The Soviet manpower series includes border guards, internal security troops, and construction troops, forces for which the US has no counterparts. Even without these forces, however, the Soviet manpower total is higher than that of the US throughout the period.

Dollar Comparisons of Military Missions

Intercontinental Attack Forces. Estimated dollar costs of Soviet intercontinental attack programs, excluding RDT&E, exceed the US figures for every year beginning in 1966, when most of the currently deployed US systems were operational. (See Figure 2.) For the 1965-1975 period as a whole, the estimated dollar costs of Soviet programs are 50 percent greater than the US level. In the Seventies they are 70 percent greater and in 1975 they exceed the US level by 100 percent.

--Expressed in dollar terms, the costs of Soviet ICBM programs are more than four times the US level for the 1965-1975 period as a whole. The estimated dollar costs of Soviet programs in 1975 are seven

times the US level, a result of the large Soviet procurement programs for new ICBMs.

--The estimated dollar costs of Soviet submarine-launched ballistic missile (SLBM) programs exceed US levels for every year beginning in 1968 and are 30 percent greater than those for the US in 1975.

--US authorizations for intercontinental bomber programs are about five times the estimated dollar costs of Soviet intercontinental bomber programs for the period as a whole.

If the estimated dollar costs of Soviet peripheral attack forces intended for use on the Eurasian continent are counted, the cumulative dollar costs of Soviet strategic attack programs for the 1965-1975 period are more than twice the cumulative US level. The US has no counterpart for the Soviet peripheral attack forces, which include large numbers of medium- and intermediate-range ballistic missiles and medium bombers.

Strategic Defense Forces. The USSR has traditionally maintained much larger strategic defense forces than the US. The cumulative dollar costs of Soviet programs over the 1965-1975 period are four times the US figure, the biggest difference being in surface-to-air missile (SAM) and fighter-interceptor programs. US authorizations for the Safeguard ABM system narrow the gap somewhat in the early Seventies. Recent reductions in US air defense programs account for the widening gap since that time. In 1975, the estimated dollar costs of Soviet strategic defense programs amount to nine times the US authorizations for strategic defense.

General Purpose Forces. The estimate of dollar costs of Soviet general purpose forces increases continuously from 1965 through 1975. The US level, in contrast, grew rapidly during the Vietnam involvement but had returned to the 1965 level by 1971. As a result, the estimated dollar costs of Soviet general purpose forces surpass the level of the US in 1970, and for the Seventies as a whole, they are 40 percent greater than the US total. In 1975 they exceed the US level by 70 percent.

The estimate of dollar costs of Soviet ground forces in 1975 is more than three times the US figure, reflecting primarily the much higher level of Soviet manpower. The dollar costs of Soviet general purpose naval forces are about 25 percent higher in 1975 than the US. The estimate of dollar costs of Soviet tactical air forces grows rapidly beginning in 1970 but in 1975 is still less than three-quarters of the US level.

Command, Support, and Other. This mission covers activities involved in command and general support, as well as all other activities--except RDT&E--which cannot be assigned to the combat missions. It also includes nuclear weapons programs. The trends in dollar costs for this mission parallel those of the combat missions, and in 1975 the dollar costs for Soviet programs are slightly higher than the US.

Resource Category Comparisons

Dollar costs of military forces can also be compared in terms of investment and operating costs.

Military Investment. The estimated dollar costs of Soviet military investment programs (excluding RDT&E) exceed the US level for comparable programs beginning in 1970. The dollar costs of Soviet investment rise rapidly beginning in 1973. US authorizations have declined sharply in the wake of the Vietnam buildup. The estimated costs of Soviet investment programs in 1975 exceed the 1972 level by 15 percent, while US authorizations in 1975 are nearly 25 percent less than in 1972. In 1975, the estimated investment costs of Soviet programs are 85 percent greater than those of the US.

--The upturn in estimated dollar costs of Soviet investment beginning in 1973 reflects the procurement of the new generation of Soviet ICBMs. US procurement of missiles declined during the same period. The estimated dollar procurement costs in 1975 for Soviet missiles are about three and one-half times those of the US.

--During the last few years the dollar procurement costs of Soviet aircraft have remained high while those of the US have declined. In 1975 the Soviet figure is some 30 percent higher.

--The cumulative estimated dollar costs of Soviet procurement for naval ships and boats exceed the US figure by 70 percent over the 1965-1975 period and are about 90 percent greater than the US in 1975.

Operating Costs. The largest component of operating costs is the cost of military personnel. Soviet military manpower rises steadily over the 1965-1975 period, whereas US military manpower has decreased.

Comparisons With Previous Estimates

Estimates of the dollar costs of Soviet defense programs are revised each year to take into account new information on and new assessments of the size, composition, and technical characteristics of the Soviet forces and to put them on a more current dollar price base. The dollar cost comparisons presented in this report show the costs of Soviet programs to be higher relative to the US than previous estimates.

The last published CIA estimate--disseminated in January 1975--extended through 1974. It showed the dollar costs of Soviet programs exceeding US authorizations in 1974 by about 20 percent (about 25 percent when pensions are excluded from both sides). In this report the dollar costs of Soviet programs for 1974 exceed the US level by about 30 percent (about 35 percent when pensions are excluded).

In an unpublished preliminary study prepared in October 1975, the estimated Soviet level exceeded that of the US by about 35 percent (about 45 percent when pensions are excluded) for the year 1975. These relationships have been cited publicly by Government officials and quoted widely in the press. The estimate in this report is that the dollar costs of Soviet programs for 1975 exceed those of the US by about 40 percent (about 50 percent when pensions are excluded).

These changes for 1974 and 1975 occurred for a number of reasons. One factor was a downward revision in US authorizations for both years in the January 1976 edition of The Five Year Defense Program reflecting more recent information. On the Soviet side, the estimates presented in this report differ from those of the earlier studies principally because of changes in the estimated costs of some weapons and activities. Changes in the Intelligence Community's estimates of the number of deployed weapon systems--particularly in the later years--also contributed to the increase, but to a lesser extent. The Intelligence Community also increased its estimate of Soviet military manpower since the last comparative cost analysis. This increase was nearly offset, however, by a decrease in the estimated number of civilians working for the Soviet Ministry of Defense.